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EXAMINER

NAMAZI, MEHDI

ART UNIT PAPER NUMBER

2188

DATE MAILED: 03/11/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

10/051,448

Applicant(s)

SCHMIDT ET AL.

Examiner

Mehdi Namazi

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12/17/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This office action is in response to request for reconsideration filed December 17, 2003.

#### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 11, and 12 have been considered but are moot in view of the new ground(s) of rejection.
- 2.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kodaira et al. (U.S. Patent 4,835,734).

As per claims 1, 11, and 12, Kodaira teaches a method comprising: receiving a virtual address; comparing at least a portion of the virtual address to a first preselected range (fig. 4, element 81, col. 5, lines 25-30, shows portion of virtual address and been compared by comparator 55 first preselected address in register); using a first mechanism to generate a first physical address from the virtual address in response to the virtual address being outside the first preselected range (fig. 4, element 12, col. 5, lines 32-33, is the first mechanism); and using a second mechanism to generate a

second physical address from the virtual address in response to the virtual address being within the first preselected range (fig. 4, element 11, or second mechanism).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-10, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodaira, and further in view of Christenson.

As per claims 2, and 13, Kodaira teaches the claimed invention, but fails to teach wherein using the first mechanism to generate the first physical address from the virtual address in response to the virtual address being outside the first preselected range further comprises using a paging mechanism to generate the first physical address from the virtual address in response to the virtual address being outside the first preselected range.

Christenson teaches if the virtual address is out of range generating an interrupt to indicate an address error, and if the virtual is not out of range the virtual address is translated to physical address using a page table (col.10, lines 55-57).

Therefore, it would have been obvious to one of ordinary skilled in the art to modify the work of Kodaira because Christenson teaches use of page table for translating virtual addresses into physical addresses in order to avoid usage of memory more then needed, and having less traffic.

As per claim 8, Kodaira teaches the claimed invention, but fails to teach storing at least one value representative of the first preselected range during an initialization period (cols. 7-8, lines 61-5).

Christenson teaches processor executes program instructions (preselected) stored in main memory to be access by processor during start up (col. 7, lines 61-67).

Therefore, it would have been obvious to one of ordinary skilled in the art to modify the work of Kodaira because Christenson teaches executing program instructions (preselected) by processor during start up in order to manage the resources of computer system such as address translation mechanism, main memory (col. 8, lines 1-5)

As per claims 3, and 14, Christenson teaches wherein using the second mechanism to generate the second physical address from the virtual address in response to the virtual address being within the first preselected range further comprises using a hard mapped mechanism to generate the second physical address from the virtual address in response to the virtual address being within the first preselected range (col. 1, lines 49-59).

As per claim 4, Christenson teaches storing an entry for a page table in the second physical address, wherein the page table entry may be used by the paging mechanism to generate the first physical address from the virtual address (col. 10, lines 55-57).

As per claim 5, Christenson teaches storing at least one value representative of the second physical address during an initialization period, wherein the second

mechanism uses the at least one value to generate the second physical address (cols. 7-8, lines 61-5).

As per claim 6, Christenson teaches storing the at least one value representative of the second physical address during the initialization period further comprises storing the at least one value representative of the second physical address during only the initialization period (cols. 7-8, lines 61-5).

As per claim 7, Christenson teaches storing the at least one value representative of the second physical address during the initialization period further comprises using secure kernel software to store the at least one value representative of the second physical address during the initialization period (cols. 7-8, lines 61-5).

As per claim 9, Christenson wherein storing the at least one value representative of the first preselected range during the initialization period further comprises storing the at least one value representative of the first preselected range during only the initialization period (cols. 7-8, lines 61-5).

As per claims 10, 15, and 16, Christenson teaches wherein storing the at least one value representative of the first preselected range during the initialization period further comprises using secure kernel software to store the at least one value representative of the first preselected range during the initialization period (col. 1, lines 16-26).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehdi Namazi whose telephone number is 703-306-2758. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 703-306-2903. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mehdi Namazi  
Examiner  
Art Unit 2188

March 7, 2004

Mano Padmanabhan  
3/8/04

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TL210